

IN THE CLAIMS:

Claim 1 (currently amended): A small-sized opening and closing device which relatively connects connecting portions of a first member and connecting portions of a second member, which construct a small-sized electronics device, with each other to open and close, comprising:

a shaft;

a cam member attached to said shaft, having a 180 degrees symmetric cam portion composed of a convex portion and a concave portion on one end phase thereof, and arrested its rotation by one connecting portion of either said first member or said second member;

a slider cam attached slidably to said shaft passing through in a central axial direction thereof and facing to said cam member, having a 180 degrees symmetric cam portion composed of a convex portion and a concave portion on a side thereof facing said cam portion of said cam member, and arrested its rotation by the other connecting portion of either said first member or said second member; and

a compression spring wound around said shaft to push said slider cam toward said cam member side; and

~~wherein each cam portion provided on an opposed side of said cam member and said slider cam separate by the position of axial core side or the outside to provide each 180 degrees symmetric cam at a different position, at least a pair of 180 degrees symmetric cams on axial core side and the outside.~~

wherein each cam portion of said cam member is separated into an inner cam convex portion located on an axial core side and an outer cam convex portion located on

an outer circumferential side, and said inner cam convex portion faces to said outer cam convex portion over an axial core portion;

wherein each cam portion of said slider cam consists of a 180 degrees symmetric inner cam comprising two pairs of convex portions located on an axial core side and concave portions, and a 180 degrees symmetric outer cam comprising two pairs of convex portions located on an outer circumferential side, and said inner cam and said outer cam are each formed by moving in a circumferential direction relative to positions of said inner cam convex portion and said outer cam convex portion, and;

wherein said inner cam and said outer cam faces to said inner cam convex portion and said outer cam convex portion respectively.

Claim 2 (currently amended): The small-sized opening and closing device according to claim 1, wherein said slider cam is provided slidably in a cam case fixedly inserted into deformed mounting hole provided on connecting portions either of said first member and said second member with a baffle on the outside, while arresting its rotation.

Claim 3 (original): The small-sized opening and closing device according to claim 2, wherein, in order that said cam member or said cam case is to be fixed on said shaft, an arresting groove in a radial direction on a fixed portion of said shaft is provided to arrest said arresting groove with said cam member or said cam case by using a fixed pin inserted from a radial direction.

Claim 4 (original): The small-sized opening and closing device according to claim

2, wherein, in order that said cam member or said cam case is to be fixed to said shaft, an arresting hole in a radial direction on a fixed portion of said shaft is provided to arrest said arresting hole with said cam member or said cam case by using a fixed pin inserted from a radial direction.

Claim 5 (original): The small-sized opening and closing device according to claim 2, wherein said cam case is arrested to a flange portion provided on one end portion of said shaft, and said cam member engages with an arresting hole provided on the other end portion by using said fixed pin.

Claim 6 (original): The small sized opening and closing device according to claim 2, wherein said cam case is arrested to one end portion of said shaft by using a snap ring.

Claim 7 (original): The small-sized opening and closing device according to claim 2, wherein said cam case is arrested to a flange portion provided on one end portion of said shaft, and said cam member is arrested to the other end portion of said shaft by using a snap ring.

Claim 8 (new): A small-sized opening and closing device which relatively connects connecting portions of a first member and connecting portions of a second member, which construct a small-sized electronics device, with each other to open and close, comprising:
a shaft;
a cam member attached to said shaft, having a 180 degrees symmetric cam portion

composed of a convex portion and a concave portion on one end phase thereof, and arrested its rotation by one connecting portion of either said first member or said second member;

a slider cam attached slidably to said shaft passing through in a central axial direction thereof and facing to said cam member, having a 180 degrees symmetric cam portion composed of a convex portion and a concave portion on a side thereof facing said cam portion of said cam member, and arrested its rotation by the other connecting portion of either said first member or said second member;

a compression spring wound around said shaft to push said slider cam toward said cam member side;

wherein each cam portion of said cam member consists of an inner cam comprising two pairs of convex portions located on an axial core side and concave portions, and a 180 degrees symmetric outer can comprising two pairs of convex portions located on an outer circumferential side, and said inner cam and said outer cam are each formed by moving in a circumferential direction relative to positions of said inner cam convex portion and said outer cam convex portion;

wherein each cam portion of said slider cam is separated into an inner cam convex portion located on an axial core side and an outer cam convex portion located on an outer circumferential side, and said inner cam convex portion faces to said outer cam convex portion over an axial core portion; and

wherein said inner cam and said outer cam faces to said inner cam convex portion and said outer cam convex portion respectively.

Claim 9 (new): The small-sized opening and closing device according to claim 1, wherein said gap in a circumferential direction is 10 degrees.

Claim 10 (new): The small-sized opening and closing device according to claim 8, wherein said gap in a circumferential direction is 10 degrees.